

Bacterial Vaginosis (BV) = NON-specific vaginitis

BY

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Definition

- BV is the most prevalent cause of vaginal symptoms among women of child-bearing age characterized by scanty mal-odourous discharge
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Epidemiology

☐ BV is:

- lowest among women undergoing routine annual examination (5%)
- highest among those attending STDs clinics (37%)

☐ Among pregnant women:

- lowest among private patients
 - increased in patients visiting teaching clinics
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Mode of transmission

- Two lines of evidence support the sexual transmission:
 1. Increased prevalence of BV among very sexually active women than among those who are sexually inexperienced
 2. BV-associated organism (particularly *G. vaginalis*) can be isolated from the male partners of women with BV
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Mode of transmission

- However, NOT all studies are in agreement and more research is required to determine whether BV is sexually-transmitted or not
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Etiology

No single organism is responsible for BV

- ☐ *Gardnella vaginalis* (+++)
 - ☐ *Mycoplasma hominis*
 - ☐ Anaerobes:
 - *Bacteroides* spp.
 - *Mobilucis* spp
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Pathogenesis

BV results from replacement of normal vaginal flora (lactobacillus) by mixed flora consisting of G.V. , M.H. and anaerobes (bacteroides & mobilucus spp.)

NB.

IUD increases the susceptibility due to unknown mechanisms

Clinical picture

Complaints:

1. Vaginal malodour
 2. Vaginal discharge
 3. NO abdominal pain
 4. NO pruritus
 5. NO dysuria
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Clinical picture

O/E

Vaginal discharge

- ☐ Non-viscous
 - ☐ Adherent to vaginal wall
 - ☐ White homogenous
 - ☐ Often visible on labia and fourchette before insertion of vaginal speculum
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Clinical picture

O/E

Intra-vaginal ex. (vaginal fluid)

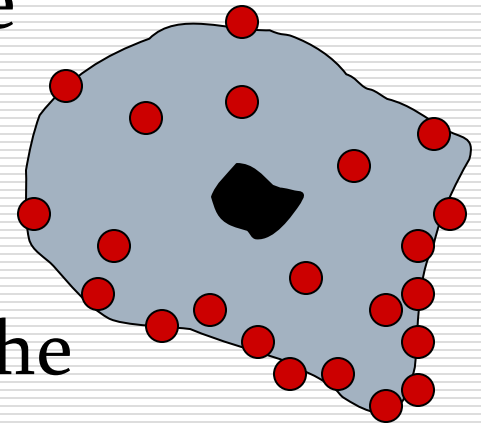
1. PH: greater than 4.5
 2. KOH test (Whipp test): 10% KOH + vaginal fluid when mixed → fishy amine odour
 3. Clue cell test: the presence of clue cells (At least 20% of vaginal epithelial cells +++)
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Clinical picture

NB. Clue cells = vaginal epithelial cells covered with vaginal bacteria giving them a stippled or granular appearance

Vaginal fluid + drop of normal saline
on glass slide – examine under high
Power 400X

At least 20% is present to establish the
diagnosis of BV



Clinical picture

4. Gram-stained smear of vaginal fluid to show:

- ☐ *G. vaginalis* (small, pleomorphic Gram-negative rods)
- ☐ Anaerobic bacteria
- ☐ NO more than 5 lactobacilli / oil immersion field

this is called **pathogenic smear**

Possible complications

1. **Obstetric complications:** chorioamnionitis – amniotic fluid infection – post partum endometritis and bacteremia
 2. **In non-pregnant females:** predispose to PID
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Treatment

1. **Metronidazole:** 500 mg twice daily for 7 days
(to non-pregnant women)
 2. **Metronidazole:** 2 gram orally ONCE
 3. **Clindamycin** 300 mg orally twice daily for 7 days
 4. **Metronidazole gel** intra-vaginal twice daily for 5 days
 5. **Clindamycin cream 2%:** 5 gm
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Questions

☐ Penicillin: NOT USED

- Less effective than metronidazole
- can affect lactobacillus

☐ Erythromycin – tetracycline: NOT USED

- Not effective

☐ Recurrence:

- 80% 9-month after treatment
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Questions

□ Causes of recurrence: NOT KNOWN- may be:

- Re-infection by colonized male partner
 - Failure to establish normal vaginal flora
 - Host-susceptibility factor
 - Failure to eradicate the causative micro-organisms
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Thank you
